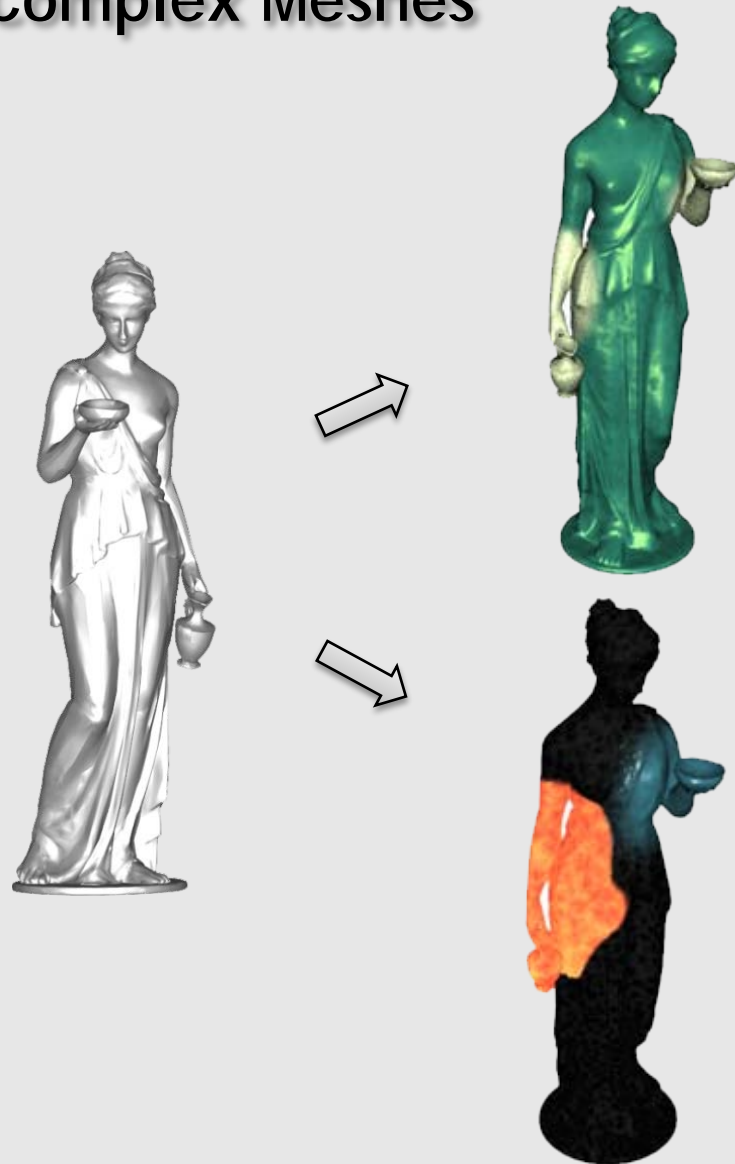


Geotextures

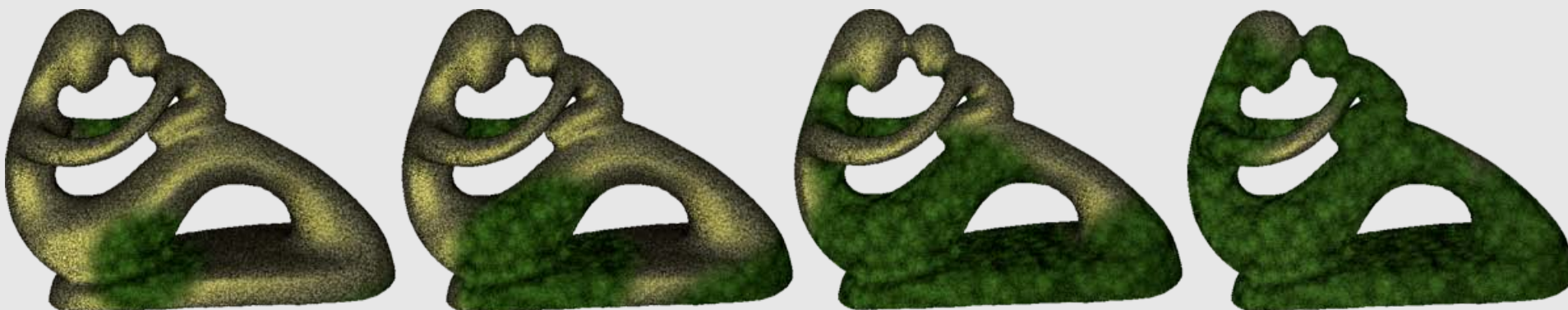
A Multi-Source Geodesic Distance Field Approach for Procedural Texturing of Complex Meshes

Geodesics for:

- Feature mapping
- Texture continuity
- Coherent on surface material propagation



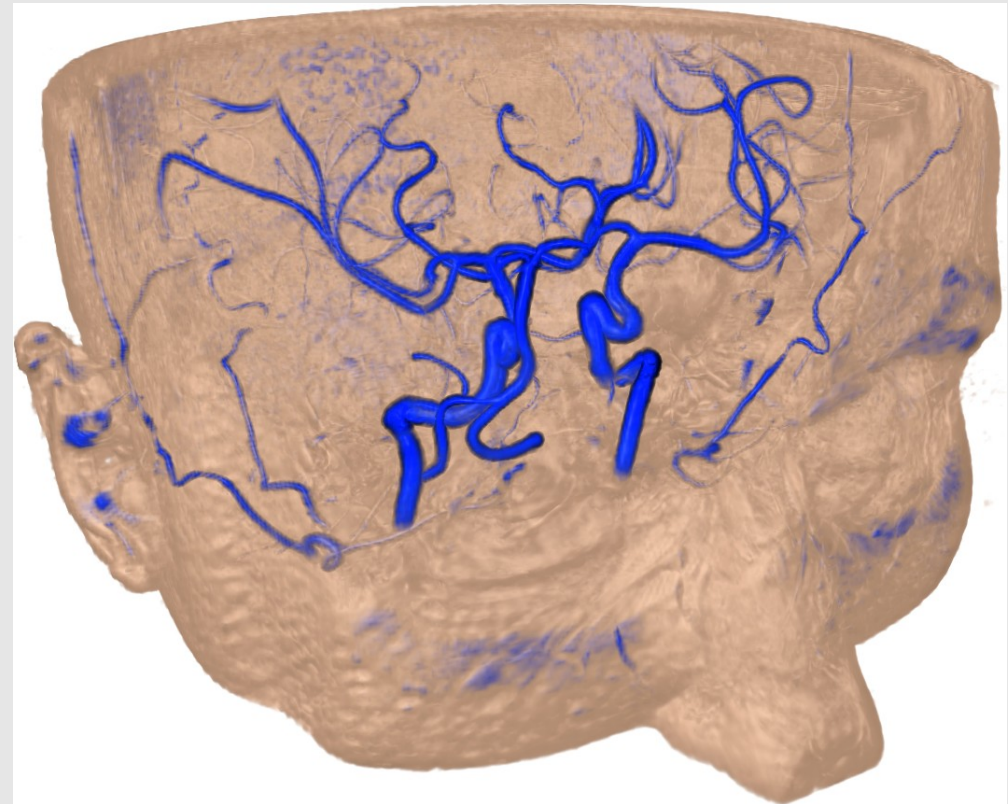
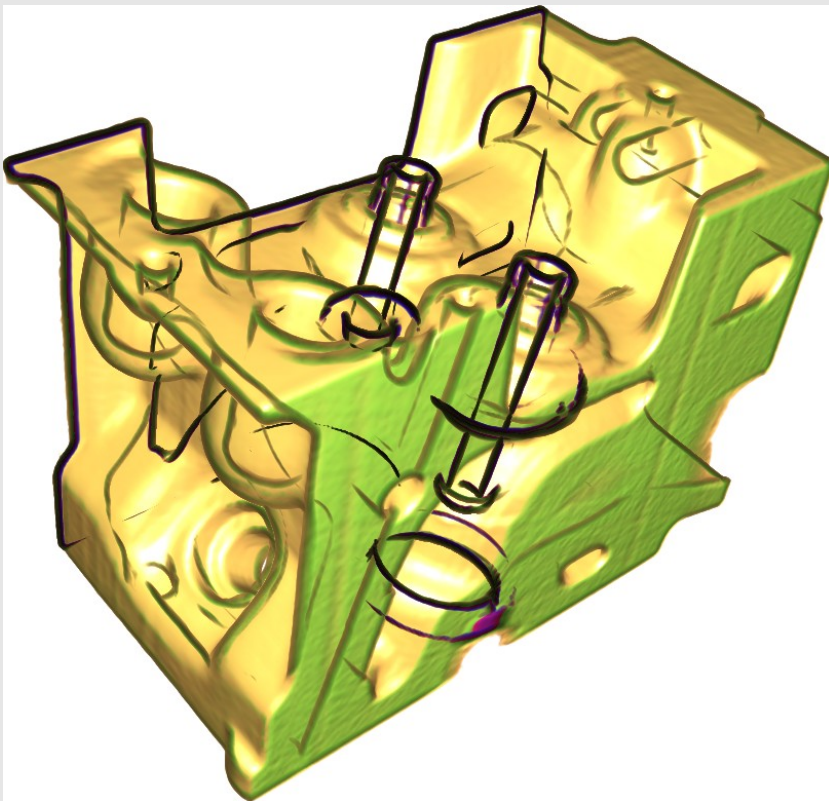
Geotextures



Importance-Aware Composition for Illustrative Volume Rendering

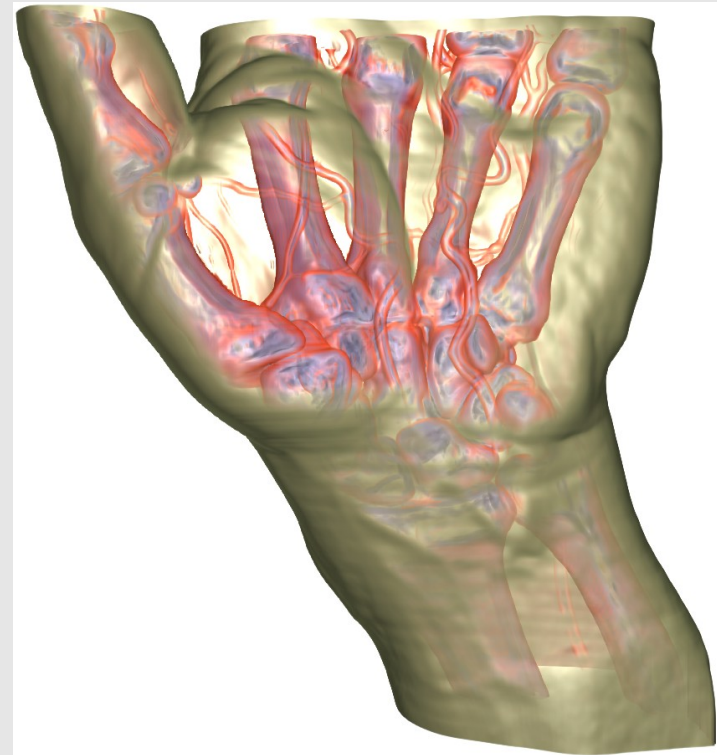
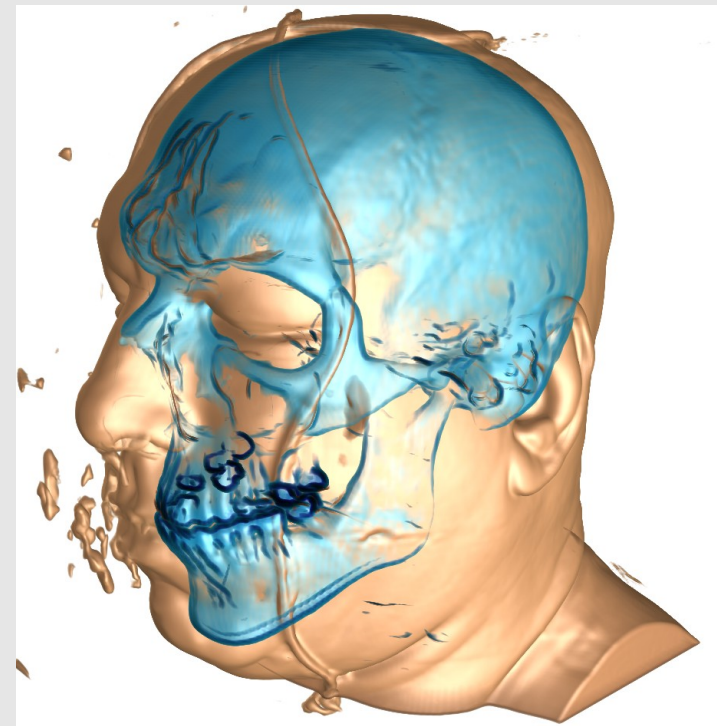
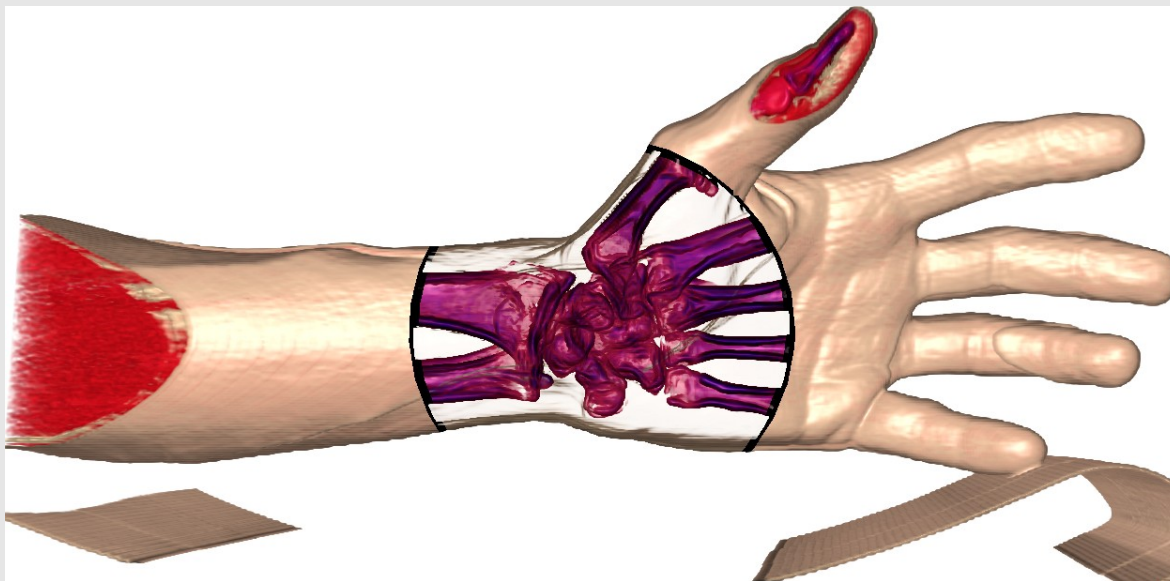
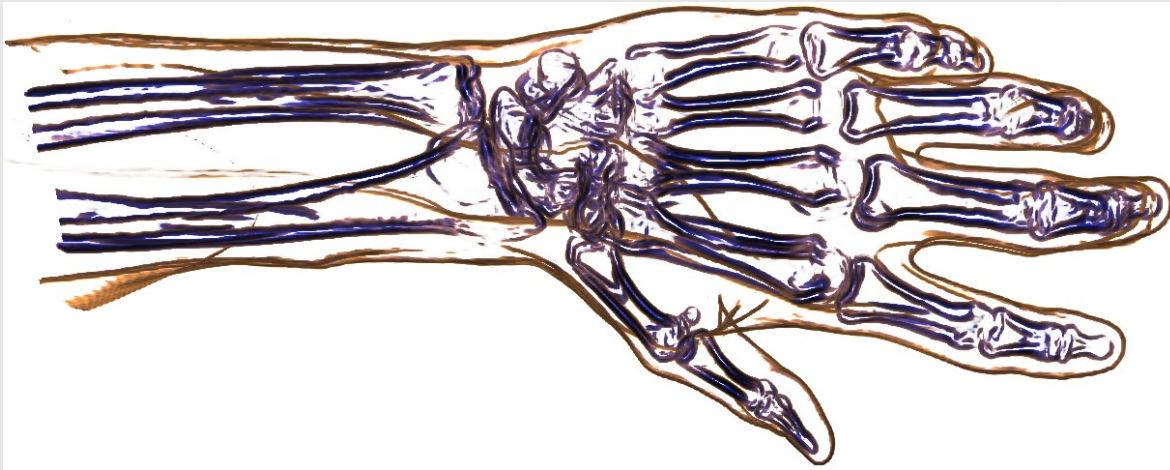
Francisco de Moura Pinto and Carla M. D. S. Freitas
Instituto de Informática - UFRGS

Precise, simple and efficient importance-based visibility control in single-pass volume rendering of unsegmented data.



Some of the possible effects:

- Silhouette rendering;
- Selective emphasis;
- Focus + Context;
- Illumination-based transparency;



Interactive Simulation and Visualization of Fluids with Surface Raycasting

- SPH simulation on GPU updates particles.
- Generation of fluid volume on GPU.
- Volume raycasting on GPU renders the volume.
- All steps done with no data transfers to the computer main memory.
- Simulation with time step of 10ms and 8192 particles: 13 fps

